## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	/0/585.620
Source:	IFWP
Date Processed by STIC:	7/21/06
•	

## ENTERED

## CRF Errors Edited by the STIC Systems Branch

Serial	Number: 10/585,620	CRF Edit Date: 7/21/0
	Realigned nucleic acid/amino acid numbers/text text "wrapped" to the next line	in cases where the sequence
<del></del>	Corrected the SEQ ID NO. Sequence numbers e	dited were:
	Inserted or corrected a nucleic number at the en NO's edited:	d of a nucleic line. SEQ ID
	Deleted: invalid beginning/end-of-file text;	page numbers
	Inserted mandatory headings/numeric identifier	s, specifically:
	Moved responses to same line as heading/numeri	c identifier, specifically:
	Other:	
	<del></del>	-



IFWP

RAW SEQUENCE LISTING DATE: 07/21/2006
PATENT APPLICATION: US/10/585,620 TIME: 17:42:23

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\07212006\J585620.raw

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            Lan, Tang
              Spendler, Tina
      7 <120> TITLE OF INVENTION: Amylase
      9 <130> FILE REFERENCE: 10583.204-US
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/585,620
C--> 11 <141> CURRENT FILING DATE: 2006-07-08
     11 <160> NUMBER OF SEQ ID NOS: 17
     13 <170> SOFTWARE: PatentIn version 3.3
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104 104 104 104	1 Gly 2 230 4 cag 5 Glr 6 8 tcg 9 Ser	y Lei D g ggt n Gly	Let gcg Ala	tcc Ser tcc Ser	tto Phe 250 gac Asp	Pro 235 acc Thr	ato Ile gat Asp	tyr cto Leu	gtc Val ctg	aac Asn 255 ggt	Let 240 aac Asr aac	ato Ile Cao His	gate Asp	y Val acc Thi gac Asp	gto Val 260 aao Asr	Ala 245 ggc l Gly	928
104 108 108 108 118	1 Gly 2 230 4 cag 5 Glr 6 8 tcg 9 Ser	y Lev D g ggt n Gly g acc	tet gcg Ala tto	tcc Ser tcc Ser 265	tto Phe 250 gac	Pro 235 acc Thr	ato Ile gat Asp acg	cto Leu ctg	gto Val ctg Leu 270	aac Asn 255 ggt	Let 24( aac Asr aac Asr	c ato	gat gat s Asp t ato	value according This gade Asp	e gto Val 260 c aao Asi	e Ala 245 ggc Gly C cac h His	928 976
104 105 106 108 116 116	1 Gl <sub>y</sub> 2 230 4 cag 5 Glr 6 8 tcg 9 Ser 0	y Lev  y ggt  g ggt  g acc  t Thi	geg Alactton Phe	tcc Ser tcc Ser 265 a cgt	Tyr tto Phe 250 gao Asp	Pro 235 acc Thr ccg Pro	ato Ile gat Asp acg Thr	cto Leu ctg	Tyr gtc Val ctg Leu 270	aac Asn 255 ggt Gly	Let 240 aac Asr aac Asr Asr	c ato	e Arg	y Value according This gade Asp 275	Phe gtc Val 260 aac Asr	Ala 245 ggc Gly Cac His	928
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104 105 106 105 116 112 113	1 Gly 2 230 4 cag 5 Glr 6 8 tcg 9 Ser 0 2 gac 3 Asr	y Let y ggt g ggt g acc Thi c aac p Asi	Let gcg/Ala ttc Phe c cca pro 280	tcc Ser tcc Ser 265 a cgt Arg	Tyr tto Phe 250 gao Asp	235 according Thr	atcollection accompany acc	cto Leu ctg Leu tac Tyr 285	gtc Val ctg Leu 270 acc	aac Asn 255 ggt Gly agc	Let 24(c) aac Asr Asr Gac Asr	c atcomplete atcomplet	gate Arg	y Value according to the Aspertate according to the Cordinal Leville (Cordinal Cordinal Cordi	Phe gto Val 260 aao Asr c cto	e Ala 245 ggc Gly Cac His caag Lys	928 976 1024
104 108 108 108 118 113 114	1 Gly 2 230 4 cag 5 Glr 6 8 tcg 9 Ser 0 2 gac 3 Asr 4 acc	Let g ggt g acc Thi c aac Asi	Let good Alac tto Photo 280 c cto	tcc Ser tcc Ser 265 a cgt Arg	Tyr ttc Phe 250 gac Asp ttc Phe	Pro 235 acc Thr ccg Pro	ato Ile gat Asp Asp Thr ago Ser	cto Leu ctg Leu tac Tyr 285	Tyr gtc Val ctg Leu 270 acc	aac Asn 255 ggt Gly agc	Let 240 240 aac Asr Asr Asr Asr Asr	c ato n Ile n C cao n His c ttt n Phe c cao n His	e Arg	y Value according to the gade Asp 275 cto a Let	Phe gtc Val 260 aac p Ass c ctc 1 Let	Ala 245 ggc Gly Cac His aag Lys	928 976
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104 108 108 108 118 114 116 117 118 120	1 Gly 2 230 4 cag 5 Glr 6 8 tcg 9 Ser 0 2 gac 3 Asr 4 aac 7 Asr 8 tag	y Let y ggt g ggt g acc Thi c aac p Asi c gct a 29! c ggc	gcg Alac tto Phe c cca 1 Pro 280 c ctg Leu 6 acc	tcc Ser tcc Ser 265 a cgt Arg	Tyr ttc Phe 250 gac Asp ttc Phe tac Tyr	Pro 235 acc Thr ccg Pro ctg Lev	atco Ilea gatra Asp acg Thr ago Ser Ilea 300 tags tags	cto Leu ctg Leu tac Tyr 285 ctg Leu	tyr gtc Val ctg Leu 270 acc Thr	aac Asn 255 Ggt Gly agc ser aga Arc	Let 24() 24() 24() 24() 24() 24() 24() 24()	c ato i Ile i Cac i His c ttt i Phe c cac o His c ato v Ile 305 c gao	gate atomic atom	y Value according to the Asp 275 cc cto a Let o Ile	Photogram  gtor Val 260 caaco Ass ccto Let cgtor Val	Ala 245 ggc ggc Gly Cac His aag Lys tac Tyr	928 976 1024 1072
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104 105 106 106 116 117 116 117 118 126 127 127	1 Gly 2 230 4 cas 5 Glr 6 8 tcs 9 Ser 0 2 gac 3 Asr 4 acc 7 Asr 8 tcs 1 Tyr 2 310	y Let y ggt g acc c Thi c aac p Asi c gct a 299 c Gly	E gcg Ala C ttc C Phe C cca A Let C ttc C Thr	tcc Ser tcc Ser 265 cgt Arg gcc gcc Glu	tto Phe 250 gac Asp tto Phe tac Tyr	Pro 235 acc Thr ccg Pro Leu gto Val	atco Ilea gat Asp acg Thr ago Ilea Ser Ilea 300 tacc Tyr	cto Leu ctg Leu tac Tyr 285 ctg Leu	gtc Val ctg Leu 270 acc Thr gcc Ala	aac Asn 255 Ggt Gly ago Ser aga Arg	Let 24(2 aac) 24(2 aac) Asr 2 aac 2 Asr 2 Asr 32(2 Ser 32(2 a)	c ato i Ile i Cao i His c ttt i Phe c cao i His c ato i Ile 305 c gao c Asp	gat gat s Asp atoe Ile gcos Ala 290 c ccos Pro	y Value according to the Aspertate Aspertate according to the Aspertate acc	Photogram  gto 260 caaco Asr ccto Let cgto yal	Ala 245 Ggc Gly Ccac His Caag Lys Ctac Tyr Ccgc Arg 325	928 976 1024 1072 1120
104 109 100 100 110 112 114 114 116 120 122 122 124	1 Gly 2 230 4 cas 5 Glr 6 8 tcs 9 Ser 0 2 gac 3 Asr 4 aac 7 Asr 8 tas 1 Tyr 2 310 4 gas	y Let y ggt g acc c Thi c aac p Asi c ggt g 299 c Gly g gat	E CCCC Photo 280 CCCC CCCC Throat CCCC CCCC CCCC CCCC CCCC CCCC CCCC C	tcc Ser tcc Ser 265 cgt Arg gcc a gag Glu	Tyr tto Phe 250 gac Asp tto Phe tac Tyr caa Gln	Pro 235 according to the condition of th	atco Ile gat acg Thr ago Tyr a	cto Leu ctg Leu tac Tyr 285 ctg Leu tcg	Tyr gtc Val ctg Leu 270 acc Thr gcc Ala	aac Asn 255 Ggt Gly ago Ser aga Too	Let 24(2 aac) Asr Asr Asr Asr Sign Gly Gly Can Sign Gly C	ato Ile O Caco His C Caco His G Caco His G Caco His G Caco His G Caco Asp G Caco Asp G Caco Asp G G G Caco Asp G G G G G G G G G G G G G G G G G G G	gates Aspectations and a gates at the control of th	y Value according to the Asp 275 according Leville according gage according gage according according to the Asp 275 according according according according to the Asp 275 according accor	Photogram  gto 260 caaco Asr ccto Let cgto gto gaac gaac gaac gaac gaac	Ala 245 Ggc Gly Cac His Caag Lys Ctac Tyr Cgc Arg	928 976 1024 1072

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PATENT APPLICATION: US/10/585,620 TIME: 17:42:23

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     306 Gly Asn Ser Tyr Thr Ala Asp Ser Asn Gly Gln Ile Cys Val Gln Leu
                                     420
     310 Ser Ser Gly Gly Pro Glu Ala Leu Val Val Ser Thr Ala Thr Gly Thr
     311
             430
                                 435
     314 Ala Thr Ala Thr Thr Leu Ser Thr Thr Thr Lys Thr Ser Thr Ser Thr
                                                  455
     318 Ala Ser Cys Ala Ala Thr Val Ala Val Thr Phe Asn Glu Leu Val Thr
                                             470
                         465
     322 Thr Asn Tyr Gly Asp Thr Ile Arg Leu Thr Gly Ser Ile Ser Gln Leu
                                         485
                    480
     326 Ser Ser Trp Ser Ala Thr Ser Gly Leu Ala Leu Ser Ala Ser Ala Tyr
                                     500
                495
     330 Thr Ser Ser Asn Pro Leu Trp Ser Val Thr Val Ser Leu Pro Ala Gly
                                 515
     334 Thr Ser Phe Glu Tyr Lys Phe Val Arg Ile Thr Ser Asp Gly Thr Val
                             530
                                                  535
     338 Thr Trp Glu Ser Asp Pro Asn Arg Ser Tyr Thr Val Pro Thr Cys Ala
                                             550
                         545
     342 Ser Thr Ala Thr Ile Ser Asn Thr Trp Arg
     343
                                         565
                     560
     346 <210> SEQ ID NO: 3
     347 <211> LENGTH: 18
     348 <212> TYPE: DNA
     349 <213> ORGANISM: Artificial
     351 <220> FEATURE:
     352 <223> OTHER INFORMATION: Primer amyD1
     355 <220> FEATURE:
     356 <221> NAME/KEY: misc feature
     357 <222> LOCATION: (3)..(3)
     358 <223> OTHER INFORMATION: n is a, c, g, or t
     360 <220> FEATURE:
     361 <221> NAME/KEY: misc feature
     362 <222> LOCATION: (12)..(12)
     363 <223> OTHER INFORMATION: n is a, c, g, or t
     365 <400> SEQUENCE: 3
W--> 366 gsntaccayg gntactgg
     369 <210> SEQ ID NO: 4
     370 <211> LENGTH: 17
```

18

- 371 <212> TYPE: DNA
- 372 <213> ORGANISM: Artificial
- 374 <220> FEATURE:
- 375 <223> OTHER INFORMATION: Primer amyD2R

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 07/21/2006
PATENT APPLICATION: US/10/585,620 TIME: 17:42:24

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\07212006\J585620.raw

#### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 3,12
Seq#:4; N Pos. 15
Seq#:5; N Pos. 15
Seq#:6; N Pos. 3,6,15
Seq#:7; N Pos. 3,6,15
Seq#:8; N Pos. 3,6,15
Seq#:13; Xaa Pos. 9

#### Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:3,4,5,6,7,8,9,10,11,12,14,15,16,17

## VERIFICATION SUMMARY DATE: 07/21/2006 PATENT APPLICATION: US/10/585,620 TIME: 17:42:24

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\07212006\J585620.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0 L:384 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0 L:402 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0 L:430 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0 L:458 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0 L:486 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0 L:550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0

# Raw Sequence Listing before editing (for reference only)



**IFWP** 

RAW SEQUENCE LISTING

DATE: 07/19/2006 TIME: 08:29:59

PATENT APPLICATION: US/10/585,620

Input Set : A:\01-SQ Listing-06 Jul 2006.txt
Output Set: N:\CRF4\07192006\J585620.raw

3 <110> APPLICANT: Ye, Liu

4 Lan, Tang

5 Spendler, Tina

7 <120> TITLE OF INVENTION: Amylase

9 <130> FILE REFERENCE: 10583.204-US

C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/585,620

C--> 11 <141> CURRENT FILING DATE: 2006-07-08

11 <160> NUMBER OF SEQ ID NOS: 17

13 <170> SOFTWARE: PatentIn version 3.3

Does Not Comply Corrected Diskette Needed

#### ERRORED SEQUENCES

E--> 609/11

594 <210> SEQ ID NO: 17 595 <211> LENGTH: 29

596 <212> TYPE: DNA

597 <213> ORGANISM: Artificial

599 <220> FEATURE:

600 <223> OTHER INFORMATION: Primer AM835.2

602 <400> SEQUENCE: 17

603 cgtctcgagg acacaacgaa aaagcatca

29

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 07/19/2006
PATENT APPLICATION: US/10/585,620 TIME: 08:30:00

Input Set : A:\01-SQ Listing-06 Jul 2006.txt
Output Set: N:\CRF4\07192006\J585620.raw

#### Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:3,4,5,6,7,8,9,10,11,12,14,15,16,17

## VERIFICATION SUMMARYDATE: 07/19/2006PATENT APPLICATION: US/10/585,620TIME: 08:30:00

Input Set : A:\01-SQ Listing-06 Jul 2006.txt
Output Set: N:\CRF4\07192006\J585620.raw

. . . .

L:11 M:270 C: Current Application Number differs, Replaced Current Application No L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0 L:384 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0 L:402 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0 L:430 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0 L:458 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0 L:486 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0 L:550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0 L:550 M:254 E: No. of Bases conflict, this line has no nucleotides.